DNFSB/MBC = 038

June 29, 1994

Mr. John Conway, Chair Defense Nuclear Facilities Safety Board 625 Indiana Avenue, NW, Suite 700 Washington, DC 20004 Public Reading Room
U: S: Department of Energy
Idaha Operations Office

Re: DNFSB Recommendation 94-1

Dear Mr. Conway,

We write to express concern about the Board's Recommendation 94-1 and to request that the Board clarify key points contained in the recommendation. As organizations which have long monitored activities in the Department of Energy's (DOE) nuclear weapons complex, we share the Board's concern about the safety conditions of various scraps, oxides, and residues stored at many DOE sites. However, the Board's recommendation does not adequately address potential safety problems associated with operating existing reprocessing and similar facilities, fully recognize positive efforts DOE has initiated in recent months, consider DOE's legal requirements such as compliance with the National Environmental Policy Act, discuss potential effects on U.S. nonproliferation policy, or encourage meaningful public involvement.

We appreciate the main thrust of the recommendation - namely that DOE should develop an integrated program plan for dealing with unstable nuclear materials left over from nuclear weapons production - and, generally, the Board's underlying sense of urgency. It is unfortunate that former Energy Secretary Watkins did not do more to avoid passing the legacy of these materials on to DOE's current managers. However, we do not support establishing an apparently arbitrary timeline on which to convert materials to a more stable form - particularly in light of the condition of facilities currently available to process nuclear materials and without a clear definition of the conditions necessary for safe interim storage.

Since the beginning of the year, DOE has taken several steps to focus national resources on addressing potential problems. Its ongoing Plutonium Vulnerability Assessment and similar reviews will enhance understanding of current conditions. Environmental Impact Statements and Environmental Assessments - though at times needlessly fragmented and prepared late in the decision making process - involve the public in a review of these conditions and the establishment of responsible solutions. Nonproliferation policy is being considered by DOE, and the Department is making serious attempts to include concerned citizens in its decision making.

Still, DOE could move faster and in a more integrated manner, and the Department could communicate its efforts and findings more effectively. We encourage the Board to use its recommendation to foster such improvements. Toward that end, we ask that the Board clarify several points, and if appropriate, modify its recommendation accordingly.

1) The Board recommends: "That those facilities that may be needed for future handling and treatment of the materials in question be maintained in a usable state. Candidate facilities include, among others, the F- and H-Canyons and the FB- and HB-Lines at the

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Savannah River Site, some plutonium-handling glove box lines among those at the Rocky Flats Plant, the Los Alamos National Laboratory, and the Hanford Site, and certain facilities necessary to support a uranium handling capability at the Y-12 Plant at the Oak Ridge Site."

We concur with the need to ensure that DOE has adequate facilities to safely manage nuclear materials - particularly those facilities necessary to convert unstable materials into a form suitable for extended storage. However, at least two aspects of the Board's recommendation are unclear.

- a) The Board refers to "candidate facilities" without indicating how DOE should determine which facilities to actually maintain in a usable state. Please clarify whether it is the Board's intention that this should be addressed in the integrated program plan called for earlier in the recommendation or by some other means. Also, describe any suggestions the Board has regarding how DOE should determine which facilities and capabilities to maintain.
- b) The Board should clarify what it means by the phrase "maintained in a usable state." Many DOE facilities do not meet current seismic and other standards or comply with DOE Orders. Is it the Board's intention that those facilities which are maintained be upgraded to be in full compliance? Over what period of time should facilities be maintained? If there is no immediate use for a facility, does the Board consider it appropriate for DOE to begin clean out of the facility while also maintaining its essential capabilities?
- The Board recommends that several materials be converted within two to three years to "forms or conditions suitable for safe interim storage." These materials include dissolved plutonium and trans-plutonium isotopes in the F-Canyon at the Savannah River Site (SRS); plutonium metal in contact with, or in proximity to, plastic; possibly unstable residues at the Rocky Flats Plant; and deteriorating irradiated reactor fuel at SRS and in the K-East Basin at Hanford. To help us better understand the Board's intention, please clarify the following:
 - a) For each material, what consequences does the Board expect might occur if conversion is not complete within two to three years?
 - b) The Board's staff recently prepared a report on plutonium storage conditions at Rocky Flats, Hanford, SRS, and the Los Alamos National Laboratory which does not appear fully consistent with the Board's recommendation. For example, the Board's staff states that, "The high-concentration plutonium solutions and reactive plutonium scrap stored at Rocky Flats pose the most severe and immediate safety risk of any stored plutonium in the DOE Weapons Complex." However, the Board's recommendation identifies plutonium and trans-plutonium solutions at SRS as an "especially urgent" problem without using any similar phrase to describe conditions at Rocky Flats. Please clarify this and any other potential discrepancies between the Board's recommendation and its staff's report.

- c) DOE is conducting a Plutonium Vulnerability Assessment to characterize current conditions associated with a wide range of plutonium forms. This study will be more thorough than that prepared by the Board's staff and could identify information not available when the Board prepared its recommendation. How should DOE mesh the results of its Plutonium Vulnerability Assessment with the Board's recommendation?
- d) For each material, what would constitute a form or condition suitable for safe interim storage? We note that the Board in its recommendation, and the Board's staff in its report, refers to a draft DOE standard on plutonium storage. Does the Board consider the draft standard adequate for each material in question?
- e) Has the Board assessed whether existing facilities are capable of completing this conversion within two to three years? Does the Board intend that this schedule be met even if the condition of facilities is unsafe for operation or if it would take many months to make facilities safer?

We believe the Board's recommendation can be a useful contribution to current efforts to ensure that materials remaining from nuclear weapons production activities are responsibly managed. We look forward to your response to our questions and concerns. Please address your reply to Brian Costner, Energy Research Foundation, 537 Harden Street, Columbia, SC 29205. Thank you.

Sincerely,

American Friends Service Committee - Denver (CO)
Citizens for Alternatives to Radioactive Dumping (NM)
Coalition for Health Concerns (KY)
Concerned Citizens for Nuclear Safety (NM)
Economists Allied for Arms Reduction (NY)

Energy Research Foundation (SC)

Environmental Defense Institute (ID)

Fernald Residents for Environmental Safety and Health (OH)

Hanford Education Action League (WA)

Institute for Energy and Environmental Research (MD)

Knolls Action Project (NY)

Nuclear Safety Campaign (WA)

Oak Ridge Environmental Peace Alliance (TN)

Panhandle Area Neighbors and Landowners (TX)

Portsmouth/Piketon Residents for Environmental Safety and Security (OH)

Snake River Alliance (ID)

Southwest Information and Research Center (NM) STAND of Amarillo, Inc. (TX)

Hon. Hazel O'Leary, Secretary U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

Re: DNFSB Recommendation 94-1

Dear Secretary O'Leary,

Attached are comments of eighteen citizen organizations on the Defense Nuclear Facilities Safety Board's (DNPSB) Recommendation 94-1 which regards plutonium storage issues in the Department of Energy's (DOE) nuclear weapons complex. We ask that you review our comments in formulating your response to the Board.

Many aspects of the Board's recommendation are unclear, and we have sought clarification of several points from the Board. Among other things, it is very important that all parties understand how the Board's recommendation fits with many related actions and policies which DOE has recently initiated. Also, it is important that DOE and the public understand what the Board means by safe interim storage, maintaining facilities in a usable state, and other key phrases contained in Recommendation 94-1.

If you agree with the concerns we have expressed to the DNFSB, we ask that you indicate to the Board the desire to see a response to our comments prior to deciding whether to accept Recommendation 94-1. If you have any questions about our comments please contact Brian Costner, Energy Research Foundation, at 803/256-7298. Thank you.

Sincerely,

American Friends Service Committee - Denver (CO) Citizens for Alternatives to Radioactive Dumping (NM) Coalition for Health Concerns (KY) Concerned Citizens for Nuclear Safety (NM) Economists Allied for Arms Reduction (NY) Energy Research Foundation (SC) Environmental Defense Institute (ID) Fernald Residents for Environmental Safety and Health (OH) Hanford Education Action League (WA) Institute for Energy and Environmental Research (MD) Knolls Action Project (NY) Nuclear Safety Campaign (WA) Oak Ridge Environmental Peace Alliance (TN) Panhandle Area Neighbors and Landowners (TX) Portsmouth/Piketon Residents for Environmental Safety and Security (OH) Snake River Alliance (ID) Southwest Research and Information Center (NM) STAND of Amarillo, Inc. (TX)